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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,845	08/04/2003	Carl Steiner	STEINER3	5068
1444	7590	11/08/2004	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C.			NGUYEN, THONG Q	
624 NINTH STREET, NW			ART UNIT	
SUITE 300			PAPER NUMBER	
WASHINGTON, DC 20001-5303			2872	

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,845

Applicant(s)

STEINER, CARL

Examiner

Thong Q Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/03 and 11/3/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings contain three sheets of figures 1-3 were received on 8/4/2003. These drawings are approved by the Examiner.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. The disclosure is objected to because of the following informalities: In page 5, on each of lines 6, 11 and 12, the numerical reference "26" should be changed to --6---. Applicant should note that the optical path is labeled as "6" as stated in page 4, lines 6-7 and shown in figure 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Abe (U.S. Patent No. 5,581,399, submitted by applicant).

Abe discloses a binocular device having an imaging system. The device as described in columns 2-4 and 6-7 and shown in figure 1 comprises a binocular system (1) having two telescopes (2). The telescopes are connected via an interpupillary adjusting system (6). Each telescope comprises an objective lens system (31L or 31R), an image erecting system (32L or 32R) having prism elements and an ocular system (35L or 35R). The imaging system (4L or 4R) comprises a lens system (42L or 42R) and a sensing device in the form of a CCD (41L or 41R). In each telescope, the light from an object is passed through the objective lens system then the image erecting system and splitted by a beam splitter (33L or 33R) into a light beam which is directed to the image sensing system and another light beam which is directed to the ocular system. Regarding to the beam-splitter disposed between the image erecting system and the ocular system, in column 9, lines 6-13, Abe discloses the use of a total reflective mirror which is moved into and out of position in a manner similar to that employed in a single lens reflex camera so that when the mirror is in the optical path, the light passed through the image erecting system is reflected to the image sensing system and when the mirror is extracted out of the optical path then the light passed through the image erecting system is directed to the ocular system.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe in view of Ishizaka (U.S. Patent No. 3,540,365).

The optical device having a binocular system and a sensing system wherein a mirror is moved to direct light passed through an image erecting system to either a sensing system or an ocular system as provided by Abe does not clearly state that the movement of the mirror is a pivotal movement as claimed. It is also noted that Abe does not disclose a mechanism for moving the mirror. However, Abe has disclosed that the movement of the total reflective mirror in his device is a total reflective mirror which is moved into and out of position in a manner similar to that employed in a single lens reflex camera. The movement of a mirror in a single lens reflex camera by pivotal movement in a coulisse system is known to one skilled in the art as can be seen in the reflex camera provided by Ishizaka. In particular, in the embodiment as described in column 2 and shown in figures 1-2, Ishizaka discloses the use of a pivotal mirror and a coulisse mechanism for pivotal moving the mirror between two positions in which one position the mirror permits the light passed through the objective lens (L) to a film (F) and in the other position, the mirror reflects the light passed through the objective (L) to a

viewing system (S). Regarding to the coulisse, Ishizaka discloses that the coulisse comprises a frame (6) for supporting the mirror (7) wherein the frame (6) comprises pins (8,9) for engaging with a bilateral slots (3a) and a curved slot (10a). A driving mechanism having lever (5) for moving the frame and the mirror about a pivotal point defined by a shaft (2). Thus, it would have been obvious to one skilled in the art at the time the invention was made to utilize the mechanism having pins, grooves, lever, and driving elements as suggested by Ishizaka in the optical system having a movable mirror provided by Abe for the purpose of pivotal moving the mirror between the two positions so that the light passed through the image erecting system is guided to either an ocular system or a sensing system.

9. Claims 2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe in view of Ishizaka (U.S. patent No. 3,540,365).

The optical device having a binocular system and a sensing system wherein a mirror is moved to direct light passed through an image erecting system to either a sensing system or an ocular system as provided by Abe does not clearly state that the movement of the mirror is a pivotal movement as claimed. It is also noted that Abe does not disclose a mechanism having spring for moving the mirror wherein the force used to move the mirror for picture recording exceed the force of holding the mirror in a stop position. However, Abe has disclosed that the movement of the total reflective mirror in his device is a total reflective mirror which is moved into and out of position in a manner similar to that employed in a

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single lens reflex camera. The movement of a mirror in a single lens reflex camera by pivotal movement in a coulisse system is known to one skilled in the art as can be seen in the reflex camera provided by Ishizaka. In particular, in the embodiment as described in column 2 and shown in figure 3, Ishizaka discloses the use of a pivotal mirror and a coulisse mechanism for pivotal moving the mirror between two positions in which one position the mirror permits the light passed through the objective lens (L) to a film (F) and in the other position, the mirror reflects the light passed through the objective (L) to a viewing system (S). Regarding to the coulisse, Ishizaka discloses that the coulisse comprises a frame (6) for supporting the mirror (7) wherein the frame (6) comprises pins (8,9) for engaging with a bilateral slots (3a). The pin (9) is also abutted the cam surface (10'a) of the cam (10') by biasing force provided by a spring 912) which connects the plate 93) and a lever (5). A driving mechanism having lever (5) for moving the frame and the mirror about a pivotal point defined by a shaft (2). It is also noted that the movement of the mirror when the mirror is in its position for reflect light to the viewing system is limited by the formation of a stop (11) formed on the cam (10). Thus, the use of the stop (11) to limit the movement of the mirror when the mirror is in a stop position is inherently provided the result that the force used to hold the mirror is smaller than the force used to lift the mirror when the mirror is not in its stop position. Thus, it would have been obvious to one skilled in the art at the time the invention was made to utilize the mechanism having pins, grooves, lever, and driving elements as suggested by Ishizaka in the optical

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system having a movable mirror provided by Abe for the purpose of pivotal moving the mirror between the two positions so that the light passed through the image erecting system is guided to either an ocular system or a sensing system.

10. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe in view of Ishibai et al (U.S. Patent No. 4,293,187).

The optical device having a binocular system and a sensing system wherein a mirror is moved to direct light passed through an image erecting system to either a sensing system or an ocular system as provided by Abe does not disclose the use of another mirror and lens system disposed in the downstream of the pivotal mirror as claimed. However, the use of optics including a stationary mirror, lens system, and sensing system wherein the stationary mirror is disposed in the downstream of a rotating mirror and lens elements are disposed between the two mirrors and between the stationary mirror and the sensing system is known to one skilled in the art as can be seen in the binocular system provided by Ishibai et al. In particular, in columns 2-3 and figure 1, Ishibai et al disclose a binocular system having an objective system (1), an image erecting system (6,7), an ocular system (11) and optics for directing light passed through the objective to an sensing system (5). The optics comprises a rotating mirror (2), a stationary reflecting element (16), lens elements (L3, L4) disposed between the rotating mirror 92) and the stationary reflective element (16), and lens elements (8) disposed between the stationary reflective element (16) and the image screen (17). Thus, it would have been obvious to one skilled in the art to modify the

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device provided by Abe by using a stationary element and lens elements as suggested by Ishibai et al for the purpose of guiding light from a pivotal mirror to a sensing system for the purpose of reducing the size of the system in a horizontal dimension.

Conclusion

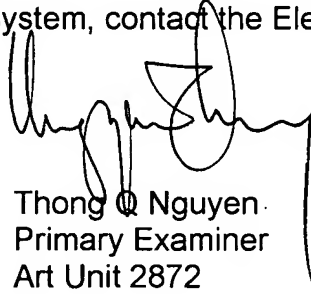
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The U.S. Patent No. 5,581,399 listed in the form PTO-1449 filed on 8/4/03 has been lined through because it is listed again in the form PTO-1449 filed on 11/3/03. That patent and other art cited in the PTO-1449 forms have been considered by the Examiner.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
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